

SOL Instruction Tracking Form

Grade 3 Mathematics

Place the SOL Instruction Tracking Form after the VGLA Collection of Evidence (COE) Coversheet. Use the SOL Instruction Tracking Form to track the evidence collected for submission.

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| K.1 The student, given two sets containing 10 or fewer concrete items, will | |
| | identify and |
| | describe one set as having more, fewer, or the same number of members as the other set, using the concept of one-to-one correspondence. |
| K.2 The student, given a set containing 10 or fewer concrete items, will | |
| a) | tell how many are in the set by counting the number of items orally; |
| b) | select the corresponding numeral from a given set; and |
| c) | write the numeral to tell how many are in the set. |
| K.3 The student, given an ordered set of three objects and/or pictures, will | |
| | indicate the ordinal position of each item, first through third, and the ordered position of each item from |
| | left-to-right, |
| | right-to-left, |
| | top-to-bottom, and/or |
| | bottom-to-top. |
| K.4 The student will investigate and recognize patterns from counting by fives and tens to 30, using | |
| | concrete objects and |
| | a calculator. |
| K.5 The student will | |
| | count forward to 30 and |
| | backward from 10. |
| 1.1 The student will | |
| | count objects in a given set containing between 1 and 100 objects and |
| | write the corresponding numeral. |
| 1.2 The student will group a collection of up to 100 objects into | |
| | tens and ones and |
| | write the corresponding numeral to develop an understanding of place value. |
| 1.3 The student will | |
| | count forward by ones, fives, and tens to 100, |
| | by twos to 20, and |
| | backward by ones from 20. |
| 1.4 The student will | |
| | recognize and write numerals 0 through 100. |
| 1.5 The student will | |
| | identify the ordinal positions first through tenth, using an ordered set of objects. |
| 1.6 The student will | |
| | identify and represent the concepts of one-half and one-fourth, using appropriate materials or a drawing. |

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| 2.1 The student will | | |
| a) | | read, |
| | | write, and |
| | | identify the place value of each digit in a three-digit numeral, using numeration models; and |
| b) | | round two-digit numbers to the nearest ten. |
| 2.2 The student will compare two whole numbers between 0 and 999, using | | |
| | | symbols ($>$, $<$, or $=$) and |
| | | words (<i>greater than</i> , <i>less than</i> , or <i>equal to</i>). |
| 2.3 The student will | | |
| | | identify the ordinal positions first through twentieth, using an ordered set of objects. |
| 2.4 The student will | | |
| | | identify the part of a set and/or region that represents fractions for |
| | | one-half, |
| | | one-third, |
| | | one-fourth, |
| | | one-eighth, and |
| | | one-tenth and |
| | | write the corresponding fraction. |
| 2.5 The student will | | |
| a) | | count forward by twos, fives, and tens to 100, starting at various multiples of 2, 5, or 10, using |
| | | mental mathematics, |
| | | paper and pencil, |
| | | hundred chart, |
| | | calculators, and/or |
| | | concrete objects, as appropriate; |
| b) | | count backward by tens from 100; |
| c) | | group objects by threes and fours; and |
| d) | | recognize even and odd numbers, using objects. |
| 3.1 The student will | | |
| | | read and write six-digit numerals and |
| | | identify the place value for each digit. |
| 3.2 The student will round a whole number, 9,999 or less, to the nearest | | |
| | | ten, |
| | | hundred, and |
| | | thousand. |
| 3.3 The student will compare two whole numbers between 0 and 9,999, using | | |
| | | symbols ($>$, $<$, or $=$) and |
| | | words (<i>greater than</i> , <i>less than</i> , or <i>equal to</i>). |
| 3.4 The student will recognize and use the inverse relationships between | | |
| | | addition/subtraction to complete basic fact sentences. * |
| | | multiplication/division to complete basic fact sentences. * |
| | | <i>* Students will use these relationships to solve problems such as $5 + 3 = 8$ and $8 - 3 = \underline{\quad}$</i> |

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| 3.5 The student will | | |
| a) | | divide regions and sets to represent a fraction; and |
| b) | | name and write the fractions represented by a given model |
| | | area/region, |
| | | length/measurement, and |
| | | set |
| * <i>Fractions (including mixed numbers) will include halves, thirds, fourths, eighths, and tenths.</i> | | |
| 3.6 The student will compare the numerical value of two fractions | | |
| | | having like and unlike denominators, using concrete or pictorial models involving |
| | | areas/regions, |
| | | lengths/measurements, and |
| | | sets. |
| 3.7 The student will read and write decimals expressed as tenths and hundredths, using | | |
| | | concrete materials and |
| | | models. |
| K.6 The student will | | |
| | | add and subtract whole numbers, using up to 10 concrete items. |
| 1.7 The student, given a familiar problem situation involving magnitude, will | | |
| a) | | select a reasonable magnitude from three given quantities: |
| | | a one-digit numeral, |
| | | a two-digit numeral, and |
| | | a three-digit numeral (e.g., 5, 50, and 500); and |
| b) | | explain the reasonableness of his/her choice. |
| 1.8 The student will | | |
| | | recall basic addition facts – i.e., sums to 10 or less – and the corresponding subtraction facts. |
| 1.9 The student will create and solve story and picture problems involving | | |
| | | one-step solutions, using |
| | | basic addition and |
| | | subtraction facts. |
| 2.6 The student will | | |
| | | recall basic addition facts – i.e., sums to 18 or less - and the corresponding subtraction facts. |
| 2.7 The student, given two whole numbers whose sum is 99 or less, will | | |
| a) | | estimate the sum; and |
| b) | | find the sum, using various methods of calculation |
| | | mental computation, |
| | | concrete materials, and |
| | | paper and pencil. |
| 2.8 The student, given two whole numbers, each of which is 99 or less, will | | |
| a) | | estimate the difference; and |
| b) | | find the difference, using various methods of calculation |
| | | mental computation, |
| | | concrete materials, and |
| | | paper and pencil. |

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| 2.9 The student will create and solve one-step addition and subtraction problems using data from | | |
| | | simple tables, |
| | | picture graphs, |
| | | bar graphs, and |
| | | practical situations. |
| 2.10 The student, given a simple addition or subtraction fact, will | | |
| | | recognize and describe the related facts which represent and describe the inverse relationship between addition and subtraction. <i>e.g., $3 + __ = 7$, $__ + 3 = 7$, $7 - 3 = __$, and $7 - __ = 3$</i> |
| 3.8 The student will solve problems involving the sum or difference of two whole numbers, each 9,999 or less, with or without regrouping, using various computational methods, including | | |
| | | calculators, |
| | | paper and pencil, |
| | | mental computation, and |
| | | estimation. |
| 3.9 The student will recall the | | |
| | | multiplication facts through the nines table and |
| | | division facts through the nines table. |
| 3.10 The student will represent multiplication and division, using area and set models, and create and solve problems that involve | | |
| | | multiplication of two whole numbers, one factor 99 or less and the second factor 5 or less |
| 3.11 The student will add and subtract with proper fractions having like denominators of 10 or less, using concrete materials and pictorial models representing | | |
| | | areas/regions, |
| | | lengths/measurements, and |
| | | sets. |
| 3.12 The student will add and subtract with decimals expressed as tenths, using | | |
| | | concrete materials, |
| | | pictorial representations, and |
| | | paper and pencil. |
| K.7 The student will | | |
| | | recognize a |
| | | penny, |
| | | nickel, |
| | | dime, and |
| | | quarter |
| | | determine the value of a collection of pennies and/or nickels whose total value is 10 cents or less. |
| K.8 The student will identify the instruments used to measure | | |
| | | length (ruler), |
| | | weight (scale), |
| | | time (clock: digital and analog; calendar: day, month, and season), and |
| | | temperature (thermometer). |
| K.9 The student will tell time to the hour, using | | |
| | | an analog or digital clock. |

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| K.10 The student will compare two objects or events, using direct comparisons or nonstandard units of measure, according to one or more of the following attributes: | | |
| | | length (shorter, longer), |
| | | height (taller, shorter), |
| | | weight (heavier, lighter), |
| | | temperature (hotter, colder). |
| | <i>Examples of nonstandard units include foot length, hand span, new pencil, paper clip, block.</i> | |
| K.11 The student will identify, describe, and draw two-dimensional (plane) geometric figures | | |
| | | circle, |
| | | triangle, |
| | | square, and |
| | | rectangle. |
| K.12 The student will | | |
| | describe the location of one object relative to another | |
| | | above, |
| | | below, |
| | | next to and |
| | identify representations of plane geometric figures regardless of their position and orientation in space. | |
| | | circle, |
| | | triangle, |
| | | square, and |
| | | rectangle |
| K.13 The student will compare the | | |
| | size of plane geometric figures | |
| | | larger, |
| | | smaller and |
| | shape of plane geometric figures | |
| | | circle, |
| | | triangle, |
| | | square, and |
| | | rectangle. |
| 1.10 The student will | | |
| a) | | identify the number of pennies equivalent to |
| | | a nickel, |
| | | a dime, and |
| | | a quarter; |
| b) | | determine the value of a collection of pennies, nickels, and dimes whose total value is 100 cents or less. |
| 1.11 The student will tell time to the half-hour, using | | |
| | | an analog <u>or</u> digital clock. |
| 1.12 The student will use nonstandard units to measure | | |
| | | length and |
| | | weight. |
| 1.13 The student will compare the volumes of two given containers by using | | |
| | | concrete materials (e.g., jelly beans, sand, water, rice). |

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| 1.14 The student will compare the weight of two objects, using | |
| | a balance scale. |
| 1.15 The student will describe the proximity of objects in space | |
| | near/far, |
| | close by, |
| | below/above, |
| | up/down, |
| | beside, and |
| | next to. |
| 1.16 The student will | |
| | draw plane geometric figures, |
| | triangle, |
| | square, |
| | rectangle, and |
| | circle |
| | describe plane geometric figures, and |
| | triangle, |
| | square, |
| | rectangle, and |
| | circle |
| | sort plane geometric figures according to number of sides, corners, and square corners. |
| | triangle, |
| | square, |
| | rectangle, and |
| | circle |
| 1.17 The student will identify and describe objects in his/her environment that depict plane geometric figures | |
| | triangle, |
| | rectangle, |
| | square, and |
| | circle |
| 2.11 The student will | |
| a) | count and compare a collection of pennies, nickels, dimes, and quarters whose total value is \$2.00 or less; and |
| b) | identify the correct usage of the |
| | cent symbol (¢), |
| | dollar symbol (\$), and |
| | decimal point (.). |
| 2.12 The student will estimate and then use a ruler to make linear measurements to the nearest | |
| | centimeter and |
| | inch |
| | <i>including measuring the distance around a polygon in order to determine perimeter.</i> |
| 2.13 The student, given grid paper, will | |
| | estimate and |
| | then count the number of square units needed to cover a given surface in order to determine area. |

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| 2.14 The student will | | |
| | | estimate and |
| | | then count the number of cubes in a rectangular box in order to determine volume. |
| 2.15 The student will | | |
| | | estimate weight/mass of familiar objects in pounds and/or kilograms and then |
| | | use a scale to determine the weight/mass of familiar objects in pounds and/or kilograms |
| 2.16 The student will tell and write time to the quarter hour, using | | |
| | | analog clocks and |
| | | digital clocks. |
| 2.17 The student will use actual measuring devices to compare metric and U.S. Customary units (cups, pints, quarts, gallons, and liters) for measuring liquid volume, using the | | |
| | | concepts of <i>more, less, and equivalent</i> . |
| 2.18 The student will | | |
| a) | | use calendar language appropriately (e.g., months, today, yesterday, next week, last week); |
| b) | | determine past and future days of the week; and |
| c) | | identify specific dates on a given calendar. |
| 2.19 The student will | | |
| | | read the temperature on a Celsius and/or Fahrenheit thermometer to the nearest 10 degrees. |
| 2.20 The student will | | |
| | | identify three-dimensional (solid) concrete figures, including, |
| | | a cube, |
| | | rectangular solid (prism), |
| | | square pyramid, |
| | | sphere, |
| | | cylinder, and |
| | | cone, |
| | | describe three-dimensional (solid) concrete figures, including, |
| | | a cube, |
| | | rectangular solid (prism), |
| | | square pyramid, |
| | | sphere, |
| | | cylinder, and |
| | | cone, |
| | | sort three-dimensional (solid) concrete figures, according to the number and shape of the solid's faces, edges, and corners including: |
| | | a cube, |
| | | rectangular solid (prism), |
| | | square pyramid, |
| | | sphere, |
| | | cylinder, and |
| | | cone. |
| 2.21 The student will | | |
| | | Identify and |
| | | create figures, symmetric along a line using various concrete materials |

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| 2.22 The student will compare and contrast plane and solid geometric shapes | | |
| | | circle/sphere, |
| | | square/cube, and |
| | | rectangle/rectangular solid. |
| 3.13 The student will determine by counting | | |
| | | the value of a collection of bills and coins whose total value is \$5.00 or less, compare the value of the coins or bills, and |
| | | make change. |
| 3.14 The student will estimate and then use actual measuring devices with metric and U.S. Customary units to measure | | |
| a) | | Length |
| | | inches, |
| | | feet, |
| | | yards, |
| | | centimeters, and |
| | | meters; |
| b) | | liquid volume |
| | | cups, |
| | | pints, |
| | | quarts, |
| | | gallons, and |
| | | liters; and |
| c) | | weight/mass |
| | | ounces, |
| | | pounds, |
| | | grams, and |
| | | kilograms. |
| 3.15 The student will tell time to the nearest | | |
| | | five-minute interval using |
| | | analog and |
| | | digital |
| | | minute, using |
| | | analog and |
| | | digital clocks. |
| 3.16 The student will identify equivalent periods of time, including relationships among | | |
| | | days, months, and years, |
| | | minutes and hours. |
| 3.17 The student will read temperature to the nearest degree from | | |
| | | a Celsius thermometer and |
| | | a Fahrenheit thermometer. |
| | Real thermometers and physical models of thermometers will be used. | |

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| 3.18 The student will | |
| | analyze two-dimensional (plane) geometric figures including |
| | circle, |
| | square, |
| | rectangle, |
| | triangle, |
| | analyze three-dimensional (solid) geometric figures including |
| | cube, |
| | rectangular solid [prism], |
| | square pyramid, |
| | sphere, |
| | cone, and |
| | cylinder |
| | identify relevant properties, using concrete models, including |
| | number of corners, |
| | square corners, |
| | edges, and |
| | the number and shape of faces,. |
| 3.19 The student will | |
| | identify and |
| | draw representations of line segments and angles, using a ruler or straightedge. |
| 3.20 The student, given appropriate drawings or models, will | |
| | identify and |
| | describe congruent and symmetrical two-dimensional (plane) figures, using tracing procedures. |
| K.14 The student will gather data relating to familiar experiences by | |
| | counting and |
| | tallying. |
| K.15 The student will display objects and information, using | |
| | object graphs, |
| | pictorial graphs, and |
| | tables. |
| K.16 The student will | |
| | investigate and describe the results of dropping a two-colored counter or using a multicolored spinner. |
| 1.18 The student will | |
| | investigate, identify, and describe various forms of data collection in his/her world using |
| | tables, |
| | picture graphs, and |
| | object graphs. |
| | <i>e.g., recording daily temperature, lunch count, attendance, and favorite ice cream</i> |

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| 1.19 The student will interpret information displayed in a picture or object graph, using the vocabulary | | |
| | | more, |
| | | less, |
| | | fewer, |
| | | greater than, |
| | | less than, and |
| | | equal to. |
| 2.23 The student will | | |
| | | read a |
| | | simple picture and |
| | | bar graph, |
| | | construct a |
| | | simple picture and |
| | | bar graph. |
| | | interpret a |
| | | simple picture and |
| | | bar graph. |
| 2.24 The student will record data from experiments, using | | |
| | | Spinners, |
| | | colored tiles/cubes, and |
| | | use the data to predict which of two events is more likely to occur if the experiment is repeated. |
| 3.21 The student, given grid paper, will | | |
| a) | | collect and organize data on a given topic of his/her choice, using observations, measurements, surveys, or experiments; and |
| b) | | construct a line plot, a picture graph, or a bar graph to represent the results. Each graph will include |
| | | an appropriate title and |
| | | key. |
| 3.22 The student will | | |
| | | read and interpret data represented in |
| | | line plots, |
| | | bar graphs, and |
| | | picture graphs and |
| | | Write a sentence analyzing the data. |
| 3.23 The student will | | |
| | | investigate and describe the concept of probability as chance and |
| | | list possible results of a given situation. |
| K.17 The student will | | |
| | | sort objects according to similar attributes |
| | | size, |
| | | shape, and |
| | | color |
| | | classify objects according to similar attributes |
| | | size, |
| | | shape, and |
| | | color |

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| K.18 The student will identify, describe, and extend a repeating relationship (pattern) found in | | |
| | | common objects, |
| | | sounds, and |
| | | movements. |
| 1.20 The student will sort and classify concrete objects according to one or more attributes, including | | |
| | | color, |
| | | size, |
| | | shape, and |
| | | thickness. |
| 1.21 The student will recognize, describe, extend, and create a wide variety of patterns, including | | |
| | | rhythmic, |
| | | color, |
| | | shape, and |
| | | numerical. |
| | Patterns will include both growing and repeating patterns. Concrete materials and calculators will be used by students. | |
| 2.25 The student will identify, create, and extend a wide variety of patterns, using | | |
| | | numbers, |
| | | concrete objects, and |
| | | pictures. |
| 2.26 The student will solve problems by completing a numerical sentence involving the | | |
| | | basic facts for |
| | | addition and |
| | | subtraction. Examples include: $3 + \underline{\quad} = 7$, or $9 - \underline{\quad} = 2$. |
| | Students will create story problems, using the numerical sentences. | |
| 3.24 The student will recognize and describe a variety of patterns formed using | | |
| | concrete objects, | |
| | | numbers, |
| | tables, | |
| | pictures, and | |
| | extend the pattern, using the same or different forms | |
| | concrete objects, | |
| | numbers, | |
| | tables, and | |
| | pictures. | |

| 3.25 The student will | | | |
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| a) | | | investigate and create patterns involving |
| | | | numbers, |
| | | | operations (addition and multiplication), and |
| | | | relations that model the identity and commutative properties for |
| | | | addition |
| b) | | | multiplication; and |
| | | | demonstrate an understanding of equality by recognizing that the equal sign (=) links equivalent quantities, such as $4 \cdot 3 = 2 \cdot 6$. |

Submit Quarterly to the building level administrator/designee for review:

| Date Submitted/Initials | Date Submitted/Initials | Date Submitted/Initials | Date Submitted/Initials |
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